

REQUEST FOR RECONSIDERATION

Claims 10-15 are pending in this application. Claims 10 and 15 are independent.

The present invention provides an embossed carrier tape that can be used for packaging electronic components such as integrated circuits. The embossed carrier tape includes a sheet with embossed pockets for accommodating the electronic components. In use, the embossed pockets containing the electronic components are covered with a cover tape, and this covered embossed carrier tape is rolled up for delivery. When the electronic components are ready to be soldered to a substrate, the rolled embossed carrier tape is unrolled, the cover tape is peeled off, and the electronic components are removed from the embossed pockets of the embossed carrier tape. Applicants have discovered that breakage of embossed carrier tapes during high speed mounting of electronic components on substrates can be significantly reduced by setting the tear strength of the sheet forming the embossed carrier tape to at least 105 N/mm as defined in Japanese Industrial Standard K-7128-3.

Claims 10-15 are rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,361,901 ("Schenz") in view of Japanese Patent Publication No. 08258888 ("Miyamoto").

Schenz discloses a carrier tape that can be constructed from any suitable polymeric material. Schenz at title; column 5, lines 62-67. Schenz discloses that carrier tapes can have a surface resistance of greater than $10E04$ and less than $10E12$ ohms/square. Schenz at column 3, lines 29-33. Schenz discloses that a removable cover strip 46 can be peeled from carrier tape 10 to expose a component 2. Schenz at column 6, lines 62-65. Schenz is directed to providing a carrier tape that maintains the desired orientation of the component 2 when the component 2 is assembled into a new product. Schenz at column 3, lines 52-56.

However Schenz is silent about the tear strength of the *carrier tape*. The Office Action at page 3, lines 9-10, admits that Schenz fails to disclose that the sheet forming the carrier tape has a tear strength of at least 105 N/mm.

Miyamoto discloses a *cover tape* having an outer layer, an intermediate layer and an adhesive layer, where the intermediate layer has a tear strength (JIS K-7128) of at least 100 kg/cm. English-language translation of Miyamoto filed August 3, 2004, at [0006].

However, the cited prior art fails to suggest the limitation of independent Claims 10 and 15 of an "embossed *carrier tape* comprising a sheet having at least one embossed pocket, wherein the sheet ... has a tear strength of at least 105 N/mm as defined in Japanese Industrial Standard K-7128-3".

Any *prima facie* case of obviousness based on the cited prior art is rebutted by the significant increase in the strength of embossed carrier tape (units N) that is achieved by the present invention over the range defined by the limitation of independent Claims 10 and 15 that "the sheet has a tear strength of at least 105 N/mm as defined by Japanese Industrial Standard K-7128-3". See attached Declaration Under 37 § 1.132. The cited prior art is silent about this effect of the present invention. Thus, any *prima facie* case of obviousness based on the cited prior art is rebutted.

Because the cited prior art fails to suggest all the limitations of the claimed invention, and any *prima facie* case of obviousness is rebutted, the rejection under 35 U.S.C. § 103(a) should be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Corwin P. Umbach, Ph.D.
Registration No. 40,211

Attachment: Declaration Under 37 § 1.132

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)